

Title (en)
AUTOMATIC NOZZLE FOR FIREFIGHTING SYSTEMS

Title (de)
AUTOMATISCHE DÜSE FÜR BRANDBEKÄMPFUNGSSYSTEME

Title (fr)
BUSE AUTOMATIQUE POUR SYSTÈMES DE LUTTE CONTRE L'INCENDIE

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Application
EP 15820600 A 20151014

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Abstract (en)
[origin: WO2016059561A1] Automatic nozzle (10) for firefighting low-pressure water mist systems comprising a nozzle body (200) and shutter means (107), said nozzle body (200) comprising a plurality of axial-symmetric components (101- 106) defining an inlet opening and a plurality of inner cavities, which are fluid-dynamic connected each other by means of one or more openings, being said components (101-106) configured to generate a radial spray (10') through a circumferential opening (15), which extends all over the circumference of a second component (102), said circumferential opening (15) being formed between a base (14) of an annular board (6) of the second component (102) and an upper surface (16) of a hollow body (13) of a third component (103), and two or more full cone sprays (10'') by means of the fluid passage through cylindrical openings (26) on a circular and axial-symmetric body (24) of a fifth component (105), configured to define a turbulent motion of the fluid in at least two correspondent cylindrical cavities (23) of a fourth component (104), said two or more full cone sprays (10'') out coming through at least two orifices (22) fed by the at least two correspondent cylindrical cavities (23) and said automatic nozzle (10) characterized in that the axis of each of said cylindrical openings (26) of the fifth component (105) is inclined of a first angle (β) ranging between 10° and 80° with respect to an upper surface (S) of the circular and axial-symmetric body (24), and in that the axis of each of said cylindrical openings (26) is inclined of a second angle (γ) ranging between 30° e 90° and laying on a plane (FF), which is tangent to the upper surface (S) of the circular and axial-symmetric body (24) and contains the intersection points (R', R) between the upper surface (S) and the axis of said cylindrical openings (26) converging towards a same orifice of the two or more orifices (22), said angle (γ) being comprised between the projection of the axis of said cylindrical openings (26) on the plane (FF) and a line (r), passing through the intersection points (R', R'').

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